

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Janelle Gunther

Serial No.: Unassigned

Examiner: Unassigned

Filing Date: June 25, 2003

Group Art Unit: N/A

Title: NANOPOROUS STRUCTURES PRODUCED FROM SELF-ASSEMBLING MOLECULES

COMMISSIONER FOR PATENTS
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 Processing fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:
☐ Statement under 37 CFR 1.97(e), and
☐ a \$180.00 processing fee under 37 CFR 1.17(p).
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Please charge to Deposit Account **50-1078** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **50-1078** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449. All the references identified herein were disclosed in Patent Application No. _____ filed _____, now U. S. Patent No. _____, and, as such, copies thereof are not included pursuant to the provisions of 37 CFR 1.98(d).

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no. EV334000728US

Date of Deposit **06-25-2003**

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Washington, D.C. 20231.

By Angela Hobson
Typed Name: Angela Hobson

Respectfully submitted,

Janelle Gunther

By Bret Field

Bret Field for Timothy Joyce

Attorney/Agent for Applicant(s)
Reg. No. 37,620

Date: 06-25-2003

FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO.	SERIAL NO.
	10021057-1	00/000,000
	APPLICANT Janell Gunth r	
	FILING DATE June 25, 2003	GROUP N/A

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME
	1A			
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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	TRANSLATION	
					YES	NO
	1L					
	1M					
	1N					
	1O					
	1P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

1Q	HULTEEN et al. "Introducing Chemical Transport Selectivity into Gold Nanotubule Membranes" J. Am. Chem. Soc. 1998, 120, 6603-6604
1R	J.S. MOORE AND S.I. STUPP "Materials Chemistry of Chiral Macromolecules. 1. Synthesis and Phase Transitions" 1992 American Chemical Society pp. 3429-3441
1S	JANELLE GUNTHER and SAMUEL I. STUPP, "Surface Patterns of Supramolecular Materials" Langmuir 2001, 17, 6530-6539.

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

2Q	HARTGERINK et al. "Peptide-amphiphile nanofibers: A versatile scaffold for the preparation of self-assembling materials" PNAS, april 16, 2002, Vol. 99., No.8. 5133-5138
2R	HUGGINS et al. "Two-Dimensional Supramolecular Assemblies of A Polydiacetylene. 1. Synthesis, Structure, and Third-Order Nonlinear Optical Properties", Macromolecules 1997, 30, 5305-5312
2S	HWANG et al. "Self-assembling biomaterials" Liquid crystal phases of cholesteryl oligo(L-lactic acid) and their interactions with cells" PNAS, July 23, 2002, Vol. 99, No. 15, 9662-9667

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

3Q	JENEKHE AND CHEN "Self-Assembly of Ordered Microporous Materials from Rod-Copolymers" 15 January 1999, Vol. 283, Science, 372-375
3R	JENEKHE and CHEN "Self-Assembled Aggregates of Rod-Coil Block Copolymers and Their Solubilization and Encapsulation of Fullerenes" , Science, Vol. 279, 20 March 1998, 1903-1907
3S	MOORE and STUPP " Paramagnetic organometallic liquid crystal polymers" Polymer Bulletin 19, 251-256 (1988)

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

4Q	MUTHUKUMAR et al "Competing Interactions and Levels of Ordering in Self-Organizing Polymeric Materials" Science, Vol. 277, 29 August 1997, 1225-1232
4R	STUPP et al. "Materials Chemistry: From Glasses to Liquid Crystals To Crystals Through Molecular Symmetry and Functionalization" ACS Polymer Preprints, 1989, 396-397
4S	STUPP and BRAUN "Molecular Manipulation of Microstructures: Biomaterials, Ceramics, and Semiconductors" Science, Vol. 277, 29 August 1997, pp. 1242-1248

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

5Q	STUPP et al. "Supramolecular Materials: Self-Organized Nanostructures" Science Vol. 276, 18 April 1997, 384-389
5R	STUPP et al. "Bulk Synthesis of Two-Dimensional Polymers: The Molecular Recognition Approach" J. Am. Chem. Soc. 1995, 117, 5212-5227
5S	STUPP et al. "synthesis of Two-Dimensional Polymers" Science, Vol. 259, 1 January 1993, 59-63

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	6Q	ZUBAREV et al. "Conversion of Supramolecular Clusters to Macromolecular Objects" Science, Vol. 283, 22 January 1999, 523-526
	6R	
	6S	

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